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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,650	02/14/2002	Nileshkumar J. Parekh	020129	5504
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Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			EXAMINER JAGANNATHAN, MELANIE	
			ART UNIT	PAPER NUMBER
			2666	10

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/077,650

Applicant(s)

PAREKH ET AL.

Examiner

Melanie Jagannathan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims **1-6,14-19** are rejected under 35 U.S.C. 102(e) as being anticipated by Nevo et al. US 6,320,873.

Regarding claims 1-3, 6, 14-17, the claimed first element communicating with CDMA radio access network using CDMA protocol is disclosed by BSS (Figure 1, element 32). The claimed second element communicating with a GSM core infrastructure using GSM protocol, the first and second elements communicating with each other, whereby use of the CDMA RAN with the GSM core infrastructure is disclosed by SGSN (element 52) using GSM protocol. The claimed switch is disclosed by GPRS (element 50) for communication between CDMA and GSM networks.

Regarding claim 4,18, the claimed SGSN communicating with gateway GPRS service node, GGSN is disclosed by SGSN communicating with GGSN (element 54).

Regarding claim 5, 19, the claimed PDSN element communicating with CDMA base station controller is disclosed by BSS with CDMA BSC (element 34).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims **8, 9,11-12,21-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. US 6,526,033 in view of Forslow US 6,608,832.

Regarding claims 8-9,11-12,21-25, the claimed terminating point-to-point protocol framing from the CDMA and sending IP to GSM core infrastructure in response to selection of IP by user of a CDMA mobile station is disclosed by GSM user mobile device (Figure 3, element 240) which has dual-mode, capable of CDMA operation, in CDMA network (element 200) and the dynamic IP address of home server being relayed to user mobile device during the IP Configuration Protocol phase of Point-to-Point Protocol initialization when a user has logged in. See column 4, lines 18-26 and column 6, lines 1-11.

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Wang et al. discloses all of the limitations of the claims except for initiating packet data protocol context activation including specifying at least one access point name. Forslow discloses HLR (Figure 2, element 42) storing routing information and mapping to one or more packet data protocol addresses as well as mapping each PDP address to one or more GGSNs. See column 3, lines 48-51 and column 9, lines 11-37. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the CDMA and GSM networks of Wang et al. to include packet data protocol context activation of Forslow. One of ordinary skill in the art would be motivated to do this for improved routing between the different networks.

5. Claims **7,20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nevo et al. in view of Wang et al. U.S. 6,526,033.

Regarding claims **7,20**, Nevo et al. discloses all the limitations of the claims except for switch terminating point-to-point protocol framing from the CDMA RAN and sends Internet protocol to the GSM core infrastructure in response to selection of IP by a user of CDMA mobile station communicating with CDMA RAN.

Wang et al. discloses subscribers roaming into CDMA networks with user mobile device (Figure 3, element 240), having dual-mode, capable of CDMA operation, roaming in wireless network (element 200) and the dynamic IP address of home server is relayed to user mobile device during the IP Configuration Protocol phase of Point-to-Point Protocol initialization when a user has logged in. See column 6, lines 1-11. At the time the invention was made it would

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have been obvious to a person of ordinary skill in the art to modify the system of Nevo et al. with use of point-to-point protocol and IP addressing of Wang et al. between CDMA and GSM systems. One of ordinary skill in the art would be motivated to do this to facilitate data transfer between the CDMA and GSM protocols for proper communication.

6. Claims 10, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. and Forslow in view of Nevo et al.

Regarding claims 10, 13, Wang et al. and Forslow discloses all the limitations of the claims except for the claimed switch having a packet data serving node communicating with CDMA radio access network using CDMA protocol and SGSN communicating with a GSM core infrastructure using GSM protocol, the elements communicating with each other, whereby use of the CDMA RAN with the GSM core infrastructure.

The claimed first element communicating with CDMA radio access network using CDMA protocol is disclosed by BSS (Figure 1, element 32). The claimed second element communicating with a GSM core infrastructure using GSM protocol, the first and second elements communicating with each other, whereby use of the CDMA RAN with the GSM core infrastructure is disclosed by SGSN (element 52) using GSM protocol. The claimed switch is disclosed by GPRS (element 50) for communication between CDMA and GSM networks.

The claimed SGSN communicating with gateway GPRS service node, GGSN is disclosed by SGSN communicating with GGSN (element 54). The claimed PDSN element communicating with CDMA base station controller is disclosed by BSS with CDMA BSC (element 34). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the use of point-to-point protocol and IP addressing in systems

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of Wang et al and Forslow with system of Nevo et al. having elements that interconnect two different protocols such CDMA and GSM. One of ordinary skill in the art would be motivated to do this to facilitate data transfer between the CDMA and GSM protocols for proper communication.

7. Claims **26-29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Naqvi et al. US 6,545,992 in view of Forslow.

Naqvi et al. discloses CDMA RAN and GSM infrastructure and the use of third generation networks such as CDMA2000. See column 1, lines 19-21. Naqvi et al. does not disclose selecting packet data protocol context as IP or PPP without changing a CDMA standard. Forslow discloses HLR (Figure 2, element 42) storing routing information and mapping to one or more packet data protocol addresses as well as mapping each PDP address to one or more GGSNs. See column 3, lines 48-51 and column 9, lines 11-37. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the CDMA and GSM networks of Naqvi et al. to include packet data protocol context activation of Forslow. One of ordinary skill in the art would be motivated to do this for improved routing between the different networks.

Response to Arguments

8. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection. Regarding claims 1-6, 10-13, 14-19, Applicant argues neither Naqvi nor Gorsuch disclose switch that interconnects CDMA and GSM infrastructures. Examiner submits new grounds of rejection for claims 1-6, 14-19 with reference Nevo et al. disclosing switch by GPRS communicating with CDMA network and GSM network (see Figure 1).

Regarding claims 8-9, 11-12 and 21-25, Applicant argues reference Wang et al. does not disclose claimed limitation of user of a CDMA mobile station and rather discloses GSM user on a GSM mobile station. However, Examiner contends Wang et al. discloses user mobile device with dual-mode capable of CDMA operation (see column 4, lines 18-26).

Regarding claim 26, Applicant argues Wang et al. does not disclose claimed selecting packet data protocol context as IP or PPP without changing a CDMA standard. As disclosed in present specification on page 9, PDP context is derived from HLR profile and is advantageous because it avoids having to modify CDMA standard. Examiner submits new grounds of rejection with reference Forslow which discloses HLR (Figure 2, element 42) storing routing information and mapping to one or more packet data protocol addresses as well as mapping each PDP address to one or more GGSNs. See column 3, lines 48-51 and column 9, lines 11-37.

Examiner also submits new grounds of rejection using reference Forslow for claims 8, 9, 11-12 and 21-25 for claimed packet data protocol context activation.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 703-305-8078. The examiner can normally be reached on Monday-Friday from 8:00 a.m.-4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 703-308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Melanie Jagannathan
Patent Examiner
AU 2666

MJ

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For Seema S. Rao
per [signature]
FRANK DUBOIS